

## **REMARKS**

Claims 1, 3, 4, 6, 10 and 12 have been amended and new claims 13-20 have been added. Accordingly, Claims 1-20 are pending.

### **I. Substance of Interview:**

Applicants thank Examiner Lepisto for extending the courtesy of a telephone interview conducted with Applicants' representative on December 6, 2005. The following is the Substance of the Interview: In the interview, Applicants' representative discussed with Examiner Lepisto the rejections set forth in the Office Action dated September 2, 2005 and discussed that the cited Burkholder and Roth references do not disclose a separate shutter unit or separate shielding member contained within the connector housing. Applicants' representative also stated that the cited references do not disclose a shielding member having a window that fits around the connector or an inner piece having an aperture that fits around the connector. Applicants' representative agreed to review the claims and make amendments in accordance with the above mentioned discussions.

### **II. Amendments:**

Claims 1, 3, 4, 6 and 10 were amended to clarify that the optical connector includes a separate shutter unit assembly that is received by and fitted into the connector housing. Support for these amended claims can be found throughout the specification and, specifically, in Figs. 8, 11, 13, 14, 27, 29, 31, 32, 35, 38-40, 43, 55 and 56. No new matter has been added.

Claim 12 was amended to state that the inner main section is formed with an aperture into which a ferrule from either the optical connector or connection reception side

optical connector can be inserted. Support can be found throughout the specification and, specifically, in original claim 10. Again, no new matter has been added.

New claims 13, 15, 16 and 18 state that the shutter unit is endowed with electrical conductivity. Support for these claims can be found at p.14, lines 1-6. No new matter has been added.

New claims 14 and 17 state that the window in the shielding member is smaller than the opening of the connector hole. Support for these claims can be found at p. 14, last paragraph, and in Figs. 10, 11, 14, 43, 58 and 59. No new matter has been added.

New claims 19 and 20 state that the aperture in the inner main section of the inner piece is smaller than the opening of the connector hole. Support for these claims can be found at p. 21, last paragraph to p. 23, second full paragraph, and in Fig. 60. No new matter has been added.

### **III. The invention:**

The claimed invention is directed to an optical connector that includes a separate shutter unit assembly that is received by and fitted into a connector housing. This allows for manufacturing a shutter for light interception that is more compact and cost effective. The housing can also contain a separate shielding member and an inner piece. A connector employing these features can guarantee positional accuracy and stability at the vicinity of the optical connection and can result in improvements of compactness of the connector housing and an increase in density of the connector fitting hole. These internal components of the connector allow for improvements in electromagnetic radiation shielding capability and dust protection in the vicinity of the optical connection.

#### **IV. Rejections:**

On pages 2-3, section 2 of the Office Action, claims 1-9 were rejected under 35 U.S.C. §102(b) as being anticipated by published U.S. Patent Application No. 2001/0048790 A1 to Burkholder et al. (hereinafter "Burkholder").

Burkholder discloses a shielded adapter assembly for making optical fiber connections. The adapter includes two opposing shutters that prevent debris from entering the port while preventing laser light from escaping. The Office Action indicates that the "shutter unit" disclosed by Burkholder is part of the adapter 10 itself and the "main section" is part of the adapter housing 11. Regarding claim 3, the Office Action indicates the adapter housing 11 of Burkholder forms a "window" in the "main section" of the "shutter unit."

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Nowhere does Burkholder disclose a separate shutter unit that can be fitted into and received by the connector housing. Moreover, nowhere does Burkholder disclose a shutter unit that includes a window to receive an optical connector, as claimed.

Therefore, as Burkholder does not disclose each and every element as set forth in the present claims and does not show the identical invention in as complete detail as claimed, it is respectfully submitted that the Burkholder reference cannot anticipate the present claims. See *Verdegaal*, 814 F.2d at 631 and *Richardson*, 868 F.2d at 1236.

Accordingly, it is respectfully requested that the rejection of claims 1-9 under 35 U.S.C. § 102(b), in view of Burkholder, be withdrawn.

On page 3, section 3 of the Office Action, claims 10 and 12 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,076,975 to Roth (hereinafter "Roth").

Roth discloses a fiber optic connector assembly that includes both a single shutter member 42 and a set of dual shutter members 44. The Office Action indicates that Roth discloses an inner piece 38 having engagement claws, as claimed in the present application. Applicants respectfully disagree and submit that nowhere does Roth disclose an inner piece as claimed, which includes an aperture into which a ferrule can be inserted. Moreover, regarding claim 10, nowhere does Roth disclose an optical connector that includes a separate shutter unit that can be fitted into and received by the connector housing.

Therefore, as Roth does not disclose each and every element as set forth in the present claims and does not show the identical invention in as complete detail as claimed, it is respectfully submitted that the Roth reference cannot anticipate the present claims. See *Verdegaaal*, 814 F.2d at 631 and *Richardson*, 868 F.2d at 1236.

Accordingly, it is respectfully requested that the rejection of claims 10 and 12 under 35 U.S.C. § 102(b), in view of Roth, be withdrawn.

On pages 3-4, section 4 of the Office Action, claim 11 was rejected under 35 U.S.C. §103(a) as being obvious over Roth, in further view of Burkholder.

The Office Action acknowledges that Roth does not teach expressly the inner piece being made of a shielded material, but contends that it would have been obvious to use conductive materials based on the teachings of Burkholder.

It is respectfully submitted that, for the reason discussed above with regard to the Burkholder and Roth references, neither of these references taken alone or read together teach or suggest the claimed optical connector which includes a separate shutter unit that can be fitted into and received by the connector housing and an inner piece as claimed, which includes an aperture into which a ferrule can be inserted.

Accordingly, it is respectfully requested that the rejection of claim 12 under 35 U.S.C. § 103(a), in view of the Roth, and further in view of the Burkholder, be withdrawn.

### CONCLUSION

Accordingly, Applicants respectfully submit that the application as amended, including claims 1-20, is now in proper form for allowance, which action is earnestly solicited. If resolution of any remaining issue is required, it is respectfully requested that the Examiner contact Applicants' undersigned attorney at the telephone number provided below.

Respectfully submitted,



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